

APPENDIX B

HISTORICAL AND PHOTOGRAPHIC INFORMATION ON  
THE AMERICAN TAR COMPANY SITE, SPOKANE, WASHINGTON



#### A PARENT OUTLET FOR EUROPEAN PROFESSIONAL CORPORATIONS

RECEIVED - (2001) 02-4-2000

1.  $\text{var}(x) = \sigma^2$   
 2.  $\text{cov}(x, y) = \rho \sigma \sigma_y$   
 3.  $\text{cov}(y, x) = \rho \sigma \sigma_y$   
 4.  $\text{var}(y) = \sigma_y^2$   
 5.  $\text{cov}(x, x) = \sigma^2$   
 6.  $\text{cov}(y, y) = \sigma_y^2$

CHESTER CHITT  
 1125 Eastwood Drive NW  
 CHESTER, WA 98003-0002  
 (206) 966-0745

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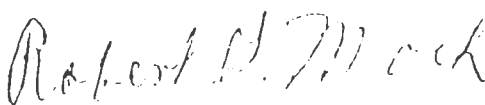
The present management of American Tar Company wishes it could be more helpful, but what is not available just is not available. Allen W. Kutz has not been connected with American Tar Company since 1976, but perhaps he could give you some of



the information you seek. American Tar Company has had no contact with any other agencies that might have site information. Perhaps the records of the Spokane County Auditor can determine ownership; perhaps the records of the City of Spokane Engineering Department has some information which might be of interest to you. If you can think of any other way that American Tar Company can be helpful, please contact the writer of this letter.

Very truly yours,

ROBERTS & SHEFELMAN

By   
Robert G. Moch

RGM:gp

cc: David L. Distler, Vice Pres.  
American Tar Company  
John Osborn, DPO, USEPA, Region X  
Deborah Flood, HWD-SM, USEPA, Region X  
Thomas Tobin, E&E, Seattle



SI - EPA

<b>EPA</b>		<b>POTENTIAL HAZARDOUS WASTE SITE DISPOSITION</b>		REGION <b>10</b>	SITE NUMBER <b>WAD981766272</b>	
File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.						
<b>I. SITE IDENTIFICATION</b>						
A. SITE NAME <b>American Tar Company</b>		B. STREET <b>North 111 Erie Street</b>				
C. CITY <b>Spokane</b>		D. STATE <b>WA</b>		E. ZIP CODE <b>99202</b>		
<b>II. TENTATIVE DISPOSITION</b>						
Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.						
RECOMMENDATION		MARK 'X'	ACTION AGENCY			
			EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED <del>NO HAZARD</del> <b>under CERCLA/SARA "N"</b>		<b>X</b>				
B. INVESTIGATIVE ACTION(S) NEEDED (If yes, complete Section III.)						
C. REMEDIAL ACTION NEEDED (If yes, complete Section IV.)						
D. ENFORCEMENT ACTION NEEDED (If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)						
E. RATIONALE FOR DISPOSITION / <b>SOURCES OF INFORMATION</b> The likely hazardous wastes would consist of PAH compounds from coal gasification. Small tar patches are in evidence however are thought to be a minor environmental or public health threat. Doubtful that site would impact aquifer based on nature of compounds & their high affinity to soil.						
F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION (mo., day, & yr.) <b>BRC A3d</b>		G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED (mo., day, & yr.)				
H. PREPARER INFORMATION						
1. NAME <b>Deborah Flood</b>		2. TELEPHONE NUMBER <b>442-2722</b>		3. DATE (mo., day, & yr.) <b>11-24-88</b>		
<b>III. INVESTIGATIVE ACTIVITY NEEDED</b>						
A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.						
B. PROPOSED INVESTIGATIVE ACTIVITY (Detailed Information)						
1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION (mo., day, & yr.)	3. TO BE PERFORMED BY (EPA, Contractor, State, etc.)	4. ESTIMATED MANHOURS	5. REMARKS		
a. TYPE OF SITE INSPECTION						
(1)						
(2)						
(3)						
b. TYPE OF MONITORING						
(1)						
(2)						
c. TYPE OF SAMPLING						
(1)						
(2)						







# ecology and environment, inc.

101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537

International Specialists in the Environment

## MEMORANDUM

DATE: November 17, 1988

TO: John Osborn, FIT-RPO, USEPA, Region X

THRU: Jeffrey Villnow, FIT-OM, E&E, Seattle *J/V*

FROM: Thomas Colligan, FIT-PM, E&E, Seattle *TC*

SUBJ: Site Inspection Recommendations  
American Tar Company  
Spokane, Washington

REF: TDD F10-8808-10  
PAN FWA0594SA

CC: Deborah Flood, HWD-SM, USEPA, Region X

No further work is recommended under CERCLA/SARA at the American Tar Company site for several reasons:

- o The threat to groundwater is thought to be low because of the insoluble nature of the waste.
- o The absence of a nearby well reduces any unforeseen impact of the site upon public health via contaminated groundwater.
- o If there are any wastes on-site (other than tar patches), they have been covered by 3 to 5 feet of fill which acts as a cover and should prevent any risk of direct exposure.

TC:csr

Enclosures



SITE INSPECTION REPORT FOR  
AMERICAN TAR COMPANY  
SPOKANE, WASHINGTON

TDD F10-8808-10  
PAN FWA0594SA

HW 3941

Report Prepared by: Ecology and Environment, Inc.  
Date: November 1988

Submitted to: J.E. Osborn, Regional Project Officer  
Field Operations and Technical Support Branch  
U.S. Environmental Protection Agency  
Region X  
Seattle, Washington



**ecology and environment, inc.**

101 YESLER WAY, SEATTLE, WASHINGTON, 98104, TEL. 206/624-9537

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SITE INSPECTION REPORT  
AMERICAN TAR COMPANY  
SPOKANE, WASHINGTON  
TDD F10-8808-10  
PAN FWA0594SA

Site Name/Address

American Tar Company  
North 111 Erie Street  
Spokane, Washington 99202

Site Inspection Participants

Thomas Colligan, Field Investigator, E&E, Seattle, Washington,  
624-9537

Lila Accra, Field Investigator, E&E, Seattle, Washington, 624-9537

Principal Site Contacts

Richard Brown, Brown's Building Materials, North 111 Erie Street,  
Spokane, Washington, 509/535-0112

Date(s) of Investigation

Site Reconnaissance: September 2, 1988



# DISCLAIMER

This report has been prepared by Ecology and Environment, Inc. under EPA Contract 68-01-7347 and reviewed and approved for public release by the U.S. Environmental Protection Agency (EPA). Mention of commercial products does not constitute endorsement by the U.S. Government. Editing and technical content of this report are the responsibility of Ecology and Environment, Inc., Seattle, Washington and do not necessarily reflect the views or policies of the EPA.





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## 1.0 INTRODUCTION

Pursuant to U.S. Environmental Protection Agency (EPA) Contract No. 68-01-7347 and Technical Directive Document (TDD) No. F10-8808-10, Ecology and Environment, Inc. (E&E) conducted a Screening Site Inspection (SSI) of the American Tar Company Site located in Spokane, Washington. The EPA Site Inspection process is intended to evaluate actual or potential environmental or public health hazards at a particular site relative to other sites across the nation for the purpose of identifying remedial action priorities. The Screening Site Inspection represents the initial phase of the SI process and is intended to collect sufficient data to enable evaluation of the site's potential for inclusion on the National Priorities List (NPL) and, for those sites determined to be NPL candidates, establish priorities for additional action. The SI process does not include extensive or complete site characterization, contaminant fate determination, or quantitative risk assessment.

This document presents a summary of information collected during the American Tar Company SSI. Included are descriptions of the project objectives and scope (Section 2.0), site operations and environmental characteristics (Section 3.0), and inspection conclusions (Section 4.0).

## 2.0 PROJECT OBJECTIVES AND SCOPE

As mentioned in Section 1.0, a Screening Site Inspection is primarily intended to gather sufficient data to evaluate a site's potential for inclusion on the National Priorities List. Accordingly, the following objectives were defined for the American Tar Company SSI:

1. Determine if past industrial operations at the site have generated hazardous wastes.
2. Determine if hazardous wastes were disposed of on-site.
3. Assess the impact of potential hazardous wastes on the surrounding environment.

To accomplish these objectives, the following general activities were conducted:

- o The EPA site file was examined.
- o An on-site inspection and interview with the current site owner was performed.
- o Information concerning surrounding demographics, surface water use, and groundwater use was collected.
- o The chemical nature of the potential waste types was examined.

Results of these activities are summarized in Sections 3.0 and 4.0 below.



### 3.0 SITE OPERATIONS AND ENVIRONMENTAL CHARACTERISTICS

#### 3.1 Site Location and Description

The American Tar Company site is the location of a former coal tar processing facility in Spokane, Washington (Figure 1). The legal description is Section 17 of Township 25 North, Range 43 East on property formerly known as Tract B of Dennis and Bradley's Addition to Spokane (EPA 1987).

The site lies adjacent to a former coal gasification plant (Spokane Gas Manufacturing Plant). Both facilities have been completely dismantled since cessation of site activities in the 1940s. Presently, the site is the location of a building salvage yard (Brown's Building Surplus) which also extends over much of the former Spokane Gas Plant.

The site occupies approximately 2 acres in a commercial/ industrial section of Spokane immediately south of the Spokane River (Figure 2). A highway bridge traverses over the site and roughly divides the American Tar Company site from the former Spokane Gas Manufacturing Plant (Figure 2). The American Tar Company site is now covered by 4 to 5 feet of fill and is used as a surplus storage yard for building materials.

The current owner of the land was identified during the site visit as Burlington Northern, Inc., by Mr. Richard Brown of Brown's Building Surplus. This was verified by a title search of the land. The title search report is reproduced in Appendix C. Mr. Brown pays a yearly lease to Burlington Northern for use of the site. The title search did not reveal any other owners for the land, indicating that the American Tar Company probably leased the land for their operations, as Mr. Brown presently does.

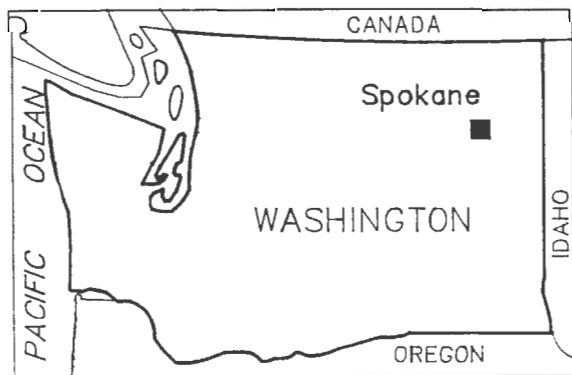
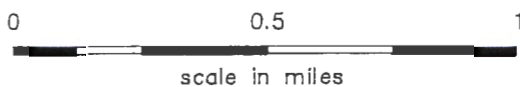
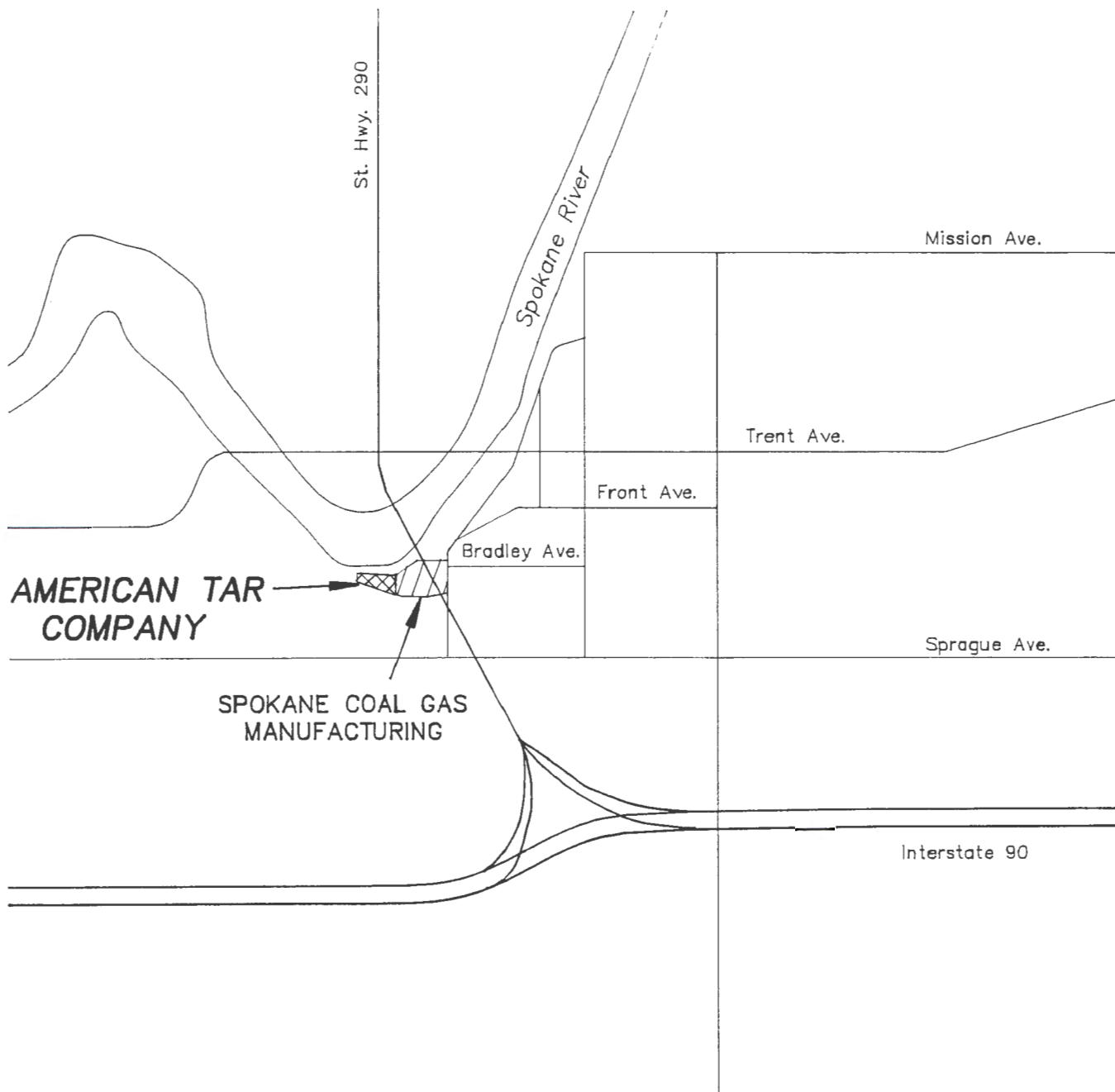
#### 3.2 Site Operations and Waste Characteristics

According to the EPA CERCLIS file, all tar produced at the adjacent Spokane Gas Manufacturing Plant was sold to the American Tar Company, which processed the tar between approximately 1905 and the mid-1940s. In 1987, a former employee of the gas plant provided a simplified layout of the facility (Figure 2), indicating that the coal tar from the water/tar separator was pumped directly to the American Tar Company Plant (EPA 1987).

The specific types and quantities of wastes and by-products generated at the American Tar Company site are unknown since no information is available on the technological process of the former plant. It has been reported that in the past coal tar was normally processed into many useful by-products including bulk commodities such as pitches, creosote oil and other distillates, road tar and other refined tars, and chemicals such as crude tar acids or bases and naphthalene (ERT 1984).

The average production rate of coal tar by the former Spokane Gas Plant was reported to be 237,000 gallons per year (AEERL 1985). This value may reflect the rate of the coal tar use at the American Tar site if they processed all the tar generated by the gas plant.



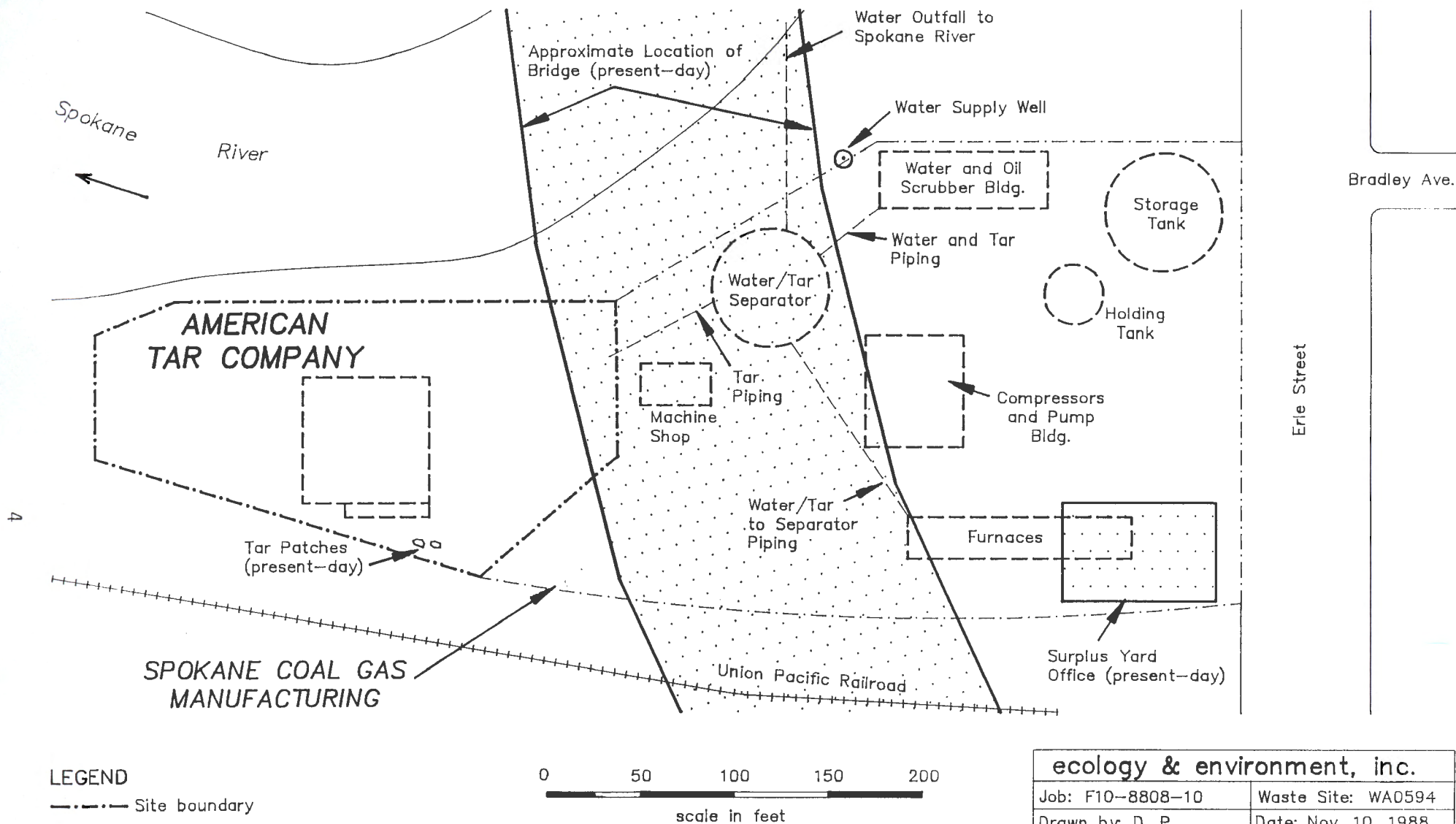


ecology & environment, inc.	
Job: F10-8808-10	Waste Site: WA0594
Drawn by: D. P.	Date: Nov. 10, 1988

**FIGURE 1**  
**LOCATION MAP**  
 AMERICAN TAR COMPANY  
 Spokane, WA







ecology & environment, inc.

Job: F10-8808-10 Waste Site: WA0594

Drawn by: D. P. Date: Nov. 10, 1988

**FIGURE 2**  
**APPROXIMATE LOCATION OF**  
**AMERICAN TAR SITE AND**  
**ADJOINING AREA (CIRCA 1905-**  
**1988)**  
 AMERICAN TAR COMPANY  
 Spokane, WA



Although specific data relating to tar disposed of at the American Tar site are unavailable, "typical" coal tars are primarily composed of polynuclear aromatic hydrocarbons (PAHs), including heterocyclic compounds (ERT 1984). Coal tars contain large amounts of high molecular weight residual material with 40 to 75 percent of the tars boiling above 300°C and 25 to 65 percent boiling above 355°C. Coke-oven coal tars are dense (specific gravity at 15°C is 1.196) and highly viscous materials (1,100 centistokes at 40°C)(ERT 1984).

Contamination of surface soil by a black, semi-solid residue was observed along a road at two locations (see photodocumentation, Appendix A) during the September 1988 site visit. A layer of gravel had been placed along a portion of the road (approximately 10 by 30 feet) to stabilize the soil for vehicle operations in the warmer summer months because softening of the residue undermined the roadway.

Based on the observed physical state of the residue (i.e., solidified) and its presence on the site surface after four decades, it may be assumed that the residue is stable and essentially immobile in the environment. Accumulation of heat by the residue in the summer probably results in softening of the material. The physical state, appearance, probable origin, and softening point of the residue suggest that it is probably a "light fraction" of coal tar distillation. A typical distribution of coal tar by distillation is approximately 5 percent tar chemicals (naphthalene, tar acids); 30 percent distillation oils (creosote, other distillates); and 60 to 65 percent residuals (road tars, crude and refined tars, pitches, and pitch coke) (ERT 1984). From these products, tar oils containing polynuclear aromatic hydrocarbons and other chemicals are of primary environmental concern (ERT 1984). However, it is unknown whether these materials remain at the site as waste products. If large quantities of tar oils were released at the site in the past, it is likely that contamination of sediment near the site has occurred. Although PAH's are stable in the environment and have a high affinity to soil and sediment, it is difficult to assess after four decades whether coal tar oils, if released, would still be present at the site.

### 3.3 Potential Contaminant Transport Pathways/Receptors

#### 3.3.1 Groundwater

Drinking water in Spokane is obtained from wells owned by Spokane Water Works (Yake 1968). Spokane Water Works produces about 281 million gallons per day from approximately 29 wells (Yake 1968). The site is located over the Spokane Valley-Rathdrum Prairie Aquifer, the sole source aquifer for the City of Spokane. The estimated yield of the aquifer is approximately 0.5 billion gallons per day, which is sufficient for consumption by over 400,000 people and associated industries (Yake 1968).

The nearest well is a municipal well located approximately 0.8 miles southeast of the site (WDOE 1988a). At one time, a supply well existed on the Spokane Gas Manufacturing Plant site, but according



to Mr. Brown, it has been covered by fill and its location is uncertain. Depth to groundwater was estimated to be between 25 and 50 feet, based on well logs in the area (WDOE 1988b).

### 3.3.2 Surface Water

The Spokane River forms the northern boundary of the site. A survey of water rights revealed no downstream users of the river for drinking or irrigation purposes (WDOE 1988a). The Spokane River is widely used for recreational purposes and for spawning and migration of brown trout (Hasada 1988).

## 4.0 SUMMARY AND CONCLUSIONS

The American Tar Company site is located in an industrial section of Spokane, Washington. The site is presently the location of part of a large building salvage yard along the banks of the Spokane River. From approximately 1905 to the mid 1940s, the site was the location of a facility which reprocessed coal tar from an adjacent coal gasification plant.

No information is available to specifically assess the types and quantities of waste handled or disposed of at American Tar Company site. However, based on data from other coal gasification facilities, the most likely hazardous wastes generated would consist of PAH compounds. If any did exist at the site, their immobility in the environment would lessen their potential to impact groundwater under the site.

All of the former buildings have been removed and the site is covered with 3 to 5 feet of fill. The only evidence of waste is small tar patches along a site road that may be underlain by larger quantities of tar. Direct contact with exposed waste at the site is thought to be a minor environmental threat because of the fill covering the site.

A sole source aquifer underlies the site and serves a population of over 400,000 people. The Spokane River is used for industrial and recreational purposes.

Based on the lack of evidence of large quantities of hazardous wastes and the low potential for these waste types at the site to impact the environment, the American Tar Company site does not appear to pose a significant environmental risk from uncontrolled hazardous waste.

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## REFERENCES

- Air and Energy Engineering Research Laboratory (AEERL), 1985, Research Triangle Park, NC 27711, Survey of Town Gas and By-Product Production and Locations in the U.S. (1880-1950), prepared for USEPA under Contract No. 68-02-3137, EPA-600/7-85-004.
- Ecology and Environment, Inc. (E&E), 1986, Coal/Oil Gasification Site Study, Region X, prepared for the USEPA under Contract No. 68-01-6682 and TDD R10-8405-03.
- Environmental Research & Technology (ERT), 1984, Pittsburgh, PA and Coppers Company, Inc., Handbook on Manufactured Gas Plant Sites, prepared for Utility Solid Waste Activity Group Superfund Committee, Washington, DC under ERT Project No. P-D215.
- Hasada, John, March 1988, Washington Department of Fisheries, personal communication with J. Hunt, E & E.
- U.S. Environment Protection Agency (EPA), 1987, Preliminary Assessment for the American Coal Tar Company, prepared by Ecology and Environment, Inc.
- Washington Department of Ecology (WDOE), 1988a, Washington Public Water Supply System Listing.
- \_\_\_\_\_, 1988b, Well Log Listing, Eastern office.
- Yake, Glen A., 1968, Spokane Water - The Best in the West, Department of Public Utilities, Water Division, City of Spokane, Washington.



